



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

HLA

| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|--------------------------------------|-------------|----------------------|------------------------|------------------|
| 10/650,062 | 08/27/2003 | Yasuaki Natori | 03518/LH | 7351 |
| 1933 | 7590 | 07/11/2006 | EXAMINER | |
| FRISHAUF, HOLTZ, GOODMAN & CHICK, PC | | | BOOSALIS, FANI POLYZOS | |
| 220 Fifth Avenue | | | ART UNIT | |
| 16TH Floor | | | PAPER NUMBER | |
| NEW YORK, NY 10001-7708 | | | 2884 | |

DATE MAILED: 07/11/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/650,062

Applicant(s)

NATORI, YASUAKI

Examiner

Faye Boosalis

Art Unit

2884

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on submission of 4 May 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 6-8, 10-16 and 19-21 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 6, 12-14, 16 and 19-21 is/are allowed.
- 6) ☒ Claim(s) 7, 8, 10, 11 and 15 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 27 August 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Comment on Submissions

1. This communication is responsive to submissions of 4 May 2006.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 7-8, 10-11 and 15 are rejected under 35 U.S.C. 102(b) as being anticipated by *Kashima et al* (US 6,094,300 A).

Regarding claim 7, Kashima discloses a laser scanning microscope comprising: a first optical scanning system (1) which scans a first laser light (100) for observing a sample on the sample (110); a first light branch device (101) which separates a light from a sample from an optical path of the first laser light (100); at least one photodetector (115) which detects the light from the sample from an optical path of the first light branch device; a second optical scanning system (3) which irradiates a specific portion on the sample with a second laser light for stimulating or operating the sample; and a wavelength selection device (112) which is disposed between the first light branch device and the photodetector (115) and which has a first function of transmitting a desired observation light and a second function for limiting transmission of the second laser light (2) (col. 7, lines 4-27, col. 8, lines 45-50 and col. 9, lines 38-58); and wherein

Art Unit: 2884

the wavelength selection device comprises an interference filter (See Generally Fig. 1 and col. 7, lines 28-39 and col. 8, lines 35-50).

Regarding claim 8, Kashima discloses a laser scanning microscope comprising: a first optical scanning system (1) which scans a first laser light (100) for observing a sample on the sample (110); a first light branch device (101) which separates a light from a sample from an optical path of the first laser light (100); at least one photodetector (115) which detects the light from the sample from an optical path of the first light branch device; a second optical scanning system (3) which irradiates a specific portion on the sample with a second laser light for stimulating or operating the sample; and a wavelength selection device (112) which is disposed between the first light branch device and the photodetector (115) and which has a first function of transmitting a desired observation light and a second function for limiting transmission of the second laser light (2) (col. 7, lines 4-27, col. 8, lines 45-50 and col. 9, lines 38-58); and a transmittance of the second laser light (3) by the wavelength selection device (112) is not more than 0.01% (See Generally Fig. 1 and col. 12, lines 10-29).

Regarding claim 10, Kashima discloses the laser scanning microscope wherein the wavelength selection device (112) comprises an interference filter comprising: a first interference coating, which performs the first function, on the surface of a substrate; and a second interference coating, which performs the second function, on another surface of the substrate (col. 10, lines 15-63).

Regarding claim 11, Kashima discloses the laser scanning microscope wherein the second laser light (2) is an ultraviolet or infrared light (See Generally Fig. 1 and col. 8, lines 51-65).

Regarding claim 15, Kashima discloses the laser scanning microscope wherein the interference filter comprising: a first interference coating, which performs the first function; and a second interference coating, which performs the second function, on another surface of the substrate (col. 10, lines 15-63).

Allowable Subject Matter

4. Claims 6, 12-14, 16, 19 and 20-21 are allowed.

5. The following is an examiner's statement of reasons for allowance:

Regarding independent claim 6, the prior art does not disclose or fairly suggest a laser scanning microscope comprising: a second optical scanning system wherein the second optical scanning system is attachable and detachable with respect to a main body of the laser scanning microscope that includes the first optical scanning system.

The examiner notes that while it is known in the art of a laser scanning microscope comprising: a first optical scanning system (1) which scans a first laser light (100) for observing a sample on the sample (110); a first light branch device (101) which separates a light from a sample from an optical path of the first laser light (100); at least one photodetector (115) which detects the light from the sample from an optical path of the first light branch device; a second optical scanning system (3) which irradiates a specific portion on the sample with a second laser light for stimulating or operating the sample; and a wavelength selection device (112) which is disposed between the first

Art Unit: 2884

light branch device and the photodetector (115) and which has a first function of transmitting a desired observation light and a second function for limiting transmission of the second laser light (2) (see for example *Kashima et al -- US 6,094,300 A* – Fig. 1 and col. 7, lines 4-27, col. 8, lines 45-50 and col. 9, lines 38-58), the prior art does not suggest an attachable and detachable second optical scanning system of a laser scanning microscope.

Regarding independent claim 12, the prior art does not disclose or fairly suggest a laser scanning microscope wherein the wavelength selection device comprises: at least one second interference filter which performs the second function.

The examiner notes that while it is known in the art of a laser scanning microscope comprising: a first optical scanning system (1) which scans a first laser light (100) for observing a sample on the sample (110); a first light branch device (101) which separates a light from a sample from an optical path of the first laser light (100); at least one photodetector (115) which detects the light from the sample from an optical path of the first light branch device; a second optical scanning system (3) which irradiates a specific portion on the sample with a second laser light for stimulating or operating the sample; and a wavelength selection device (112) which is disposed between the first light branch device and the photodetector (115) and which has a first function of transmitting a desired observation light and a second function for limiting transmission of the second laser light (2) (see for example *Kashima et al -- US 6,094,300 A* – Fig. 1 and col. 7, lines 4-27, col. 8, lines 45-50 and col. 9, lines 38-58); and wherein the wavelength selection device comprises an interference filter (see for example *Kashima*

Art Unit: 2884

et al -- US 6,094,300 A – Fig. 1 and col. 7, lines 28-39 and col. 8, lines 35-50), the prior art does not suggest wherein a wavelength selection device comprises at least one second interference filter.

The remaining 13-14, 16, 19 and 20-21 are allowable based on their dependency.

Conclusion

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Faye Boosalis whose telephone number is 571-272-2447. The examiner can normally be reached on Monday thru Friday from 7:30 AM to 4:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Dave Porta can be reached on 571-272-2444. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

7. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

FB


OTILIA GABOR
PRIMARY EXAMINER